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## Framing of hepatitis in Nigerian newspapers and public attitude towards the disease

Gregory Herbert Ezeah & Ojonimi Godwin Alfred

Department of Mass Communication, University of Nigeria, Nsukka

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### ABSTRACT

The world is plagued with Hepatitis as one of the deadliest diseases it has ever witnessed. The situation in Nigeria is worrisome considering that the way the media presents issues affects understanding and attitude towards the disease. This study sought to analyse the patterns of reportage of hepatitis in Nigeria's mainstream newspapers and examine public attitude toward the disease. Four national dailies-Daily Sun, Vanguard, Nation and Daily Trust-were analysed over a period of three years to ascertain the dominant frame, subject matter, and extent of interpretation of the reportage of Hepatitis. Survey was adopted to ascertain public attitude towards the disease. Hinged on the Framing theory and Health Belief Model, findings revealed that the mutation-contagion (severity) frame was the most dominant frame used with a percentage figure of 61%. This implies that most of the stories laid emphasis on how deadly the disease is, hence feeding the audience with information about how bad the disease is. Further findings showed that the stories were interpretative as interpretative stories constituted 52% of the stories analysed. Other stories analysed (43%) portrayed causes and solutions of the disease as themes showing that the newspapers were balanced in their reports. Findings also showed that the public were partially aware of Hepatitis as they had little knowledge of the causes. They also had positive attitude towards the disease, however, this positive attitude can only achieve so little seeing that they had little knowledge of the causes, hence prevention was difficult. It was also observed that the information need of the public was met in the reports, but the public still had little knowledge of the causes of the disease showing a partial correlation between media reports and audience knowledge level. It was therefore recommended among others that more awareness should be created on the causes of the disease and that further studies should be carried out to explore other sources of public information on Hepatitis.

### Introduction

One of the major public health challenges in the world today is that of viral hepatitis. With an average of 4,000 death daily (World Health Organisation, WHO, 2017 report), Hepatitis has become a global terror and a threat to human existence. The necessity for human existence on which other human activities rely upon is health. The absence of health cripples every other endeavour of man. The issue of hepatitis is a global public health concern, which has set health experts, media professionals, nongovernmental organisations (NGOs) and even governments on their feet to seek a lasting solution to the disease. According to the WHO (2017), an estimated total of 257 million people globally is suffering from the Hepatitis B (the most prevalent and dangerous form of the disease). In addition, an estimated figure of 71 million people is suffering from the C type while the overall 1.34 million viral Hepatitis deaths occurred in 2015 alone (WHO, 2017). WHO (2017) further noted that this alarming death rate is only comparable to that of Tuberculosis and far higher than HIV/AIDS.

It is in response to the growing prevalence of the disease that the World Health Assembly in 2010 adopted the resolution that Hepatitis had become a global health problem where the need for governments and individuals to take action to prevent, diagnose and

treat viral hepatitis was emphasized. In furtherance to this cause, July 28<sup>th</sup> was adopted as the world Hepatitis day to promote awareness on viral Hepatitis (WHO, 2012 in Shamagana, 2016). As a result of the increasing global health burden of Hepatitis, the World Health Assembly also adopted the Global Health Sector Strategy (GHSS) on viral Hepatitis for 2016-2021 in May 2016. This strategy was adopted to reduce, (if not eliminate) the prevalence and scourge of Hepatitis in the world to keep up with the focus 2 (infectious diseases) of the UN's health SDG which is expected to come to fruition by 2030.

Africa is one of the two major homes of Hepatitis (WHO, 2017), and Nigeria emerged among the 11 countries that carry about 50% of the global Hepatitis burden (WHO in Healthcare Federation of Nigeria, 2017; *environnewnigeria*, 2017). One in 10 Nigerians is said to be living with the disease, which is deadlier than HIV/AIDS (Agada 2016 in Adesina, Okorie, Oyero, Adeyeye & Amp; Oyesomi, 2017). The nature of its prevalence in Nigeria confirms the report of WHO (2017, p. viii) that "the epidemic caused by the HBV affects mostly the WHO African and western pacific regions". In pursuance of the vision of the Global Health Sector Strategy for viral Hepatitis, five strategies were delineated by the WHO. The first strategic direction mentioned in

### Corresponding author

Gregory Herbert Ezeah. Department of Mass Communication, University of Nigeria, Nsukka.

Email: [gregory.ezeah@unn.edu.ng](mailto:gregory.ezeah@unn.edu.ng)

the report was the dissemination of information for focused direction. Hence, the place of the media in keeping up with the GHSS on viral Hepatitis is an integral part since the media are the major sources of information dissemination. For any disease epidemic, one major step to proper management, treatment and probable eradication is knowledge and awareness of such health challenge especially knowledge of the causes and preventive measures to take in reducing its spread.

The ubiquitous role of the media in providing information and education functions to the masses on health issues cannot be overstated, hence the coverage of health issues in newspaper. The media have reported health issues globally and locally, thus making them reliable sources of education and information to their audience members. The media, according to Catalan-Matamoros (2011, p. 359) "are employed at all levels of public health in the hope that three effects might occur; the learning of correct health information and knowledge, the changing of health attitudes and values and the establishment of new health behaviour." This underscores the relevance of the media in stemming the tide of the prevalence of Hepatitis in the Nigerian society. An infectious disease like Hepatitis poses a serious threat to societal wellbeing and as such, attracts the attention of the media. The media contribute to the general population's understanding of health issues and they play an enormously influential role in public responses to health issues (Shih, Wijaya, & Brossard, 2008; Leask, Hooker, & King, 2010).

Recent research efforts in media content studies have gotten to an advanced level of querying how audience members should think about matters covered and the points of view/slants they should approach the issue from (Sheufele, 1999; Semetko & Valkenburg, 2000; Tankard, 2001; Sheufele, 2004; De Vreese, 2005; Vellek 2016). This is an advancement from the more popular tradition of just stopping at the matters covered in the news media. The shift to this level was as a result of the framing studies which gained currency through the works of Gregory Bateson and sociologist, Erving Goffman in the 1950s and 1970s respectively (Koon, Hawkins & Mayhew, 2016). The way stories in newspapers are framed can go a long way in determining the meaning derived from such stories by the audience. That is why Gorp (2007, p. 62) says that "frames is an invitation or an incentive to read a news story in a particular way". It is to this end that Gollust (2008, p. 24) avers that "media depictions of a health issues can signal the problem's seriousness and the extent to which it is a threat." Frames in newspaper stories help audience members make meaning out of such stories in a particular way. Seeing the importance of framing in newspaper reportage studies, health issues like Hepatitis could be framed in Nigerian newspapers to shape public perception of the disease and motivate them into appropriate positive actions to help in tackling the challenge. It is in recourse to the above that this study investigated the different frames under which Hepatitis was reported in four select Nigerian newspapers over a period of 3 years.

### Statement of the Problem

The state of health in any society is a major determinant of the level of development that takes place in such society. When the health of a society is therefore threatened, all other activities become

suspended. In recent times, the increasing prevalence of viral Hepatitis disease in Nigeria and the world has become an issue that calls for attention across the globe. The rate of Hepatitis mortality figures has maintained a steady growth at an alarming rate as an average of 4000 lives are lost daily due to this silent killer (WHO, 2017). More worrisome is the fact that Hepatitis mortality rate has overtaken those of Malaria and HIV/AIDS (WHO, 2017). Despite the prevalence of this preventable sickness, only a few carriers of Hepatitis and the public seem to know about it. This was recorded in report released by the WHO in 2017 showing that only 9% and 20% of Hepatitis B and C infections respectively were diagnosed in 2015.

Many efforts have been put in place by governments and non-governmental organisations to assuage the scourge of this disease, but these efforts seem to have achieved little or no result in establishing a Hepatitis-free society. As the case of Hepatitis disease continues seemingly unabated, the mass media, especially the newspaper have not been left behind as an agent of education and behavioural change and as a veritable tool in the promotion of positive health attitude in the society. Newspaper framing of health issues helps to shape public knowledge level, behaviours, perception and influence how such issues are translated into policy awareness of Hepatitis and framing of Hepatitis in the media. Past research efforts (e.g., Adelakun & Hamidi, 2016; Nwabueze, Igboli, & Ubah, 2017; Gollust, 2008; Okoye, 2014; Vellek, 2016) have looked into the framing of different health issues in the media. They studied diseases like Ebola, HIV/AIDS and Diabetes, with no seen work on the framing of Hepatitis. This becomes a gap in literature which this study seeks to fill. As part of the newspaper's role in being socially responsible to the society, the frames used to communicate hepatitis become important to be studied as they will affect what is known of the disease by audience, hence affecting public attitude. Based on the foregoing, this study seeks to examine the framing of hepatitis in Nigerian newspapers in terms of dominant frame used; the subject matters; how interpretative the stories are; and also, to evaluate the attitude of the public toward hepatitis.

### Objectives of the Study

This study generally aims to find out how the Nigerian newspapers framed Hepatitis and the public attitude towards the disease. Specifically, the study seeks to:

1. Ascertain the dominant frame used in reporting Hepatitis stories in Nigerian newspapers.
2. Examine the subject matters under which Hepatitis newspaper stories were reported.
3. Find out the extent to which stories on Hepatitis are interpretative
4. Ascertain the public attitude towards the Hepatitis

### Research Questions

1. What is the dominant frame used to report Hepatitis in Nigerian newspapers?
2. Under what subject matters are Hepatitis stories reported in Nigerian newspapers?
3. To what extent are Hepatitis related stories interpretative?
4. What is the public attitude towards Hepatitis?

## Review of Empirical Studies

A study was carried out by Shih, Wijaya and Brossard (2008) used the content analysis method to analyse the dominant frame used by the media in reporting three epidemic diseases which were the mad cow disease, west Nile virus and the avian flu. Findings revealed that the consequence, uncertainty, action and consequence frames were more dominant in reportage of the public health epidemics studied. An average of 35.7% was recorded for the action frame while an average of 31.5% was recorded for the consequence frame. A study carried out by Nwabueze, Igboeli and Ubah (2017) on the framing of cartoons on Ebola virus disease in *Daily Sun*, *Vanguard* and *The Nation* newspapers revealed that the fear frame was mostly predominant in cartoon representations of Ebola. The researchers employed the qualitative content analytical technique to code cartoons based on different frames. The work was anchored on the play theory. The fear frame here is likened to the mutation-contagion frame in this study, this study dealt with cartoons on Ebola viral disease while the present study deals with Hepatitis, a silent killer disease without an outbreak.

Vellek (2016) used content analysis to examine the role of international media framing in the coverage of the Ebola epidemic. Newspapers were selected from the United States, the United Kingdom and Singapore. The researcher employed framing typologies which include- Mutation contagion, human interest, containment, economic consequence, globalization and attribution of responsibility frames. Findings revealed that the mutation contagion frame was the frequently appearing, hence dominant frame in the media. The frame was present in 71.1% of all the articles analysed making it the most focused frame used to report. The disease was mostly seen in the media as a plague metaphor as the 62.3% of the mutation contagion frame was coded as referring to the disease as a plague. On the subject matters used in reportage of health issues, a study on type 2 diabetes was carried out by Gollust (2008). The study focused on the depiction of "causes" and "solutions" subject matters. It was revealed from the study that 58% of the total stories studied mentioned at least one cause claim about type 2 diabetes. In the study, 42% of the articles did not mention any cause of the disease. Further findings revealed that 78.9% of the total stories coded for type 2 diabetes mentioned at least one proposal to solve, treat, manage or prevent the disease while 21.1% did not mention any proposal for prevention and/or treatment.

An analysis of South African news coverage of HIV by Media Tenor (2004) also revealed that when the topic was covered in the news, the treatment and prevention themes were often highlighted than others. In another study aimed at identifying frames used in the reportage of the Ebola viral disease (EVD), findings showed that the urgency frame was the dominant frame used in the reportage of the disease outbreak (Okoye, 2014). In a similar study by Adelakun and Hamed (2016) on media framing of Ebola outbreak in Nigeria, it was revealed that the treatment/containment frame was dominant in the reportage of the issues. A study by D'Angelo, Pollock, Kernicki and Shaw (2013) was conducted to ascertain the genres, and frames given to the HIV/AIDS discourse in newspapers across four African countries - Nigeria, South Africa, Kenya and Zimbabwe. Using the content analytical method, it

was discovered from the study that hard news (straight news stories) dominated the genre with 84% of the total stories signifying a low level of interpretation by the selected media houses. Further finding reveals that social costs was the dominant frame used in reporting the stories on AIDS.

Awareness level of audience members and their behaviours to health messages in the media are also of great importance to this study. Ezeah, Apeh, Omerigwe and Ojo (2012) conducted a study in Benue to ascertain the awareness level of breast cancer and attitude to the disease among women. Findings from the study revealed a superficial knowledge of breast cancer, its causes, preventive measures, and screening techniques which bred a negative attitude toward the disease. A study by Joda and Aziengbe (2017) on the knowledge and awareness of Hepatitis B among students in a Nigerian tertiary institution (Federal University, Wukari) showed a low level (63%) of awareness of Hepatitis B among respondents. It was further revealed that even those who were aware of the disease had poor knowledge of the disease. From the findings, it was recommended that the media should set the agenda for the public concerning that relate to Hepatitis B. On the awareness level of audience members of Hepatitis, Jamil, Ali, Shaheen and Basit (2010) carried out a study in Pakistan. Findings from the study revealed inadequacy in the knowledge of Hepatitis among the study population. A study was also conducted by Samuel, Adegbirigbe, Salami and Babatunde (2009) among health workers of different levels at Irrua specialist teaching hospital in Essan, Edo state to ascertain their level of awareness of HBV (Hepatitis B). Findings showed that 81% of the respondents had never heard of Hepatitis B infection (cited in Adesina et al, 2017).

## Theoretical Framework

Two relevant theories were adopted for this study; the Health Belief Model and the Framing theory.

### Framing Theory

The framing theory which has roots in different disciplines was first used in communication circles by Erving Goffman (1974). Its usage was further popularised by Entman's (1993) study. The major thrust of the theory is that how an issue is characterised in reports can have influence on how it is understood by audiences (Ekwueme, 2013). The framing theory is one that deals both with media content as well as media effects on audience. The patterns and angles used by, or emphasised by journalists in their reports of a particular issue will always affect the understanding of such issues by the audience. The press is a mirror of the world to the audience and a window through which audience members view the world. Framing theory thrives on the selection and emphasis of some certain facets to report while neglecting other aspects of the same issue. Framing helps us understand how the slant used by journalists to report issues help in audience's understanding of such issue which leads to the kind of subsequent action taken upon such message. The theory is relevant to this study in the sense that it will aid the researcher in making educated inferences as to the influence and the knowledge of audience members about the issue of Hepatitis. It helps explain what issues about Hepatitis the public know and how they are making use of the information.

## Health Belief Model

The Health Belief Model (HBM) is a model of psychology which helps researchers predict health behaviours. Giving more explicit explanation of the model in health communication, Burke (2013) in Shamagana (2016) explained that the theory addresses personal knowledge and beliefs. It is used in health promotion to design intervention and prevention programmes with a focus on assessing health behaviour of individuals through examination of perceptions and attitudes someone may have towards disease negative outcomes of certain actions. The model is one which is often used in health promotion campaigns and according to Hochbaum, one of the early proponents of the model (cited in Adesina et al., 2017), the core postulation of the original HBM is that health behaviour is determined by personal beliefs or perceptions about a disease and the strategies existing to decrease its occurrence. Thus, HBM is a model which explains the power of health messages in promoting positive attitudinal change and enforcing responsible health behaviour. There are three major elements of the model (see Beckern & Maiman, cited in Okpoko, 2013):

1. An individual's perception of susceptibility and severity of a disease.
2. An individual's perception of the benefits and barriers to taking a preventive health.
3. The cues available to an individual that would stimulate him or her to engage in preventive health activity.

The above factors provide the underlying workings of the model. This is why Glanz (2010) explains that HBM theorises that people's beliefs about whether or not they are at risk for a disease or health problem, and their perceptions of the benefits of taking action to avoid it, influence their readiness to take action. Hence, the influence of health messages on people can be ascertained through the model because a person will practise a suggested health behaviour if he/she feels that the negative health condition can be avoided; has a positive expectation that by taking a recommended action, the negative health behaviour will be avoided; believes that he/she can successfully take a recommended health action.

The theory is very useful in prevention-related and asymptomatic health issues where personal beliefs seem to be more important than disease symptoms. HBM is majorly targeted at encouraging the people to adopt positive/responsible health behaviour while minimising the harmful consequences of the health issue (Okpoko, 2013). The theory helps to give insight into the reasons behind people's actions as it relates to the level of their awareness. The model is highly relevant in explaining public attitude towards Hepatitis as a result of their knowledge/awareness level of the disease and its severity. One of the major tenets of the HBM is that the audience acts based on their perception of the severity and their susceptibility to the disease. Another tenet talks about the available cues of preventive action to take in combating the disease. These tenets see knowledge level as predictors of responsible and positive health attitude/behaviour.

## Method

### Research Design

The mixed method design was employed for this study. The mixed method design refers to the use of more than one approach for the investigation of

a research question in order to enhance confidence in the consequent results of the study (Bryman, 2008). The content analysis and survey methods were adopted for this research. These two were used to gain better insight into the problem at hand. Kerlinger as cited in Okoro and Ekwueme (2013) highlights that the content analysis helps in making a systematic and objective measurement of variables, hence its relevance to this study. The method provided a platform to x-ray the frames of Hepatitis-related stories in the newspapers. Survey on the other hand refers to the research design where opinions of respondents were sought to formulate data that provided answers and solutions to a given problem. Asemah in Ezeah and Asogwa (2013) describes the survey design as a form of descriptive design that is aimed at collecting large and small samples from a population in order to examine the distribution, incidence and interaction of educational activities like sociological and psychological variables. The survey design was considered apt for the study since the opinions of audience members on their knowledge and awareness of Hepatitis need to be sampled in order to determine areas where Hepatitis information is lacking among the people.

**Population of Study:** The population of the content analysis aspect of the study is the total number of editions published by the select newspapers (*Daily Sun, Vanguard, Daily Trust* and *The Nation*) within the study period which spanned from 1st January 2015 to 31st December, 2017 (3 years), giving rise to 1095 editions for the three years per newspaper. Since four national dailies were studied, the population then becomes 1095 X 4 which is 4380. Hence, 4380 editions served as the population for the content analysis aspect of the study. For the survey, two states- Kogi and Benue- were selected and the INEC voters' register for 2015 was consulted because adults would be in better positions to respond to the questions. From the register, Kogi and Benue had 1,350,883 and 2,015,452 voters respectively, giving a total of 3,366,335 which served as the population for the survey aspect of the study.

**Sample Size:** A sample size of 42 editions per newspaper was selected for the content analysis aspect of the study, hence the sample size was 168 editions of the select newspapers spread over the period under study. The sample size for the survey was 384 respondents using the Cochran statistical formula.

**Sampling Procedure:** The multistage sampling technique was employed for both content analysis and survey designs. According to Asemah, Gujbawu, Ekhareafor and Okpanachi (2012, p. 190) "the multistage sampling technique requires the researcher to choose his samples in stages until he gets the required sample".

For the content analysis, the purposive sampling technique was used at the first stage to select four newspapers –*Daily Sun, Vanguard, Daily Trust* and *The Nation* newspapers from the 267 circulating newspapers in the country based on the following criteria: national coverage; proper coverage of health issues; wide readership; consistency of publication. In order to arrive at the specific days to be studied, the continuous and constructed weeks as developed by Jones and Carter (1959) were used. The major

reason for employing this strategy of both continuous and constructed weeks is to ensure that prejudicial research decision is not made at the end of the day by using just the continuous week for the work (Ohaja, 2003).

At the second stage, a continuous week was purposively selected out of the 52 weeks for each year. The purposive sampling method was used here because the week to be selected had to include the world international day of Hepatitis which is July 28<sup>th</sup>. This week was chosen to allow the researchers access relevant stories to analyse since Hepatitis is not a disease that has an incidence of outbreak. Therefore, week 30 was selected to be studied for three years. Here are the editions to be studied for the continuous week for the years: July 26<sup>th</sup> – 1<sup>st</sup> August, for year 2015; July 24<sup>th</sup> – 30<sup>th</sup> July for year 2016 and July for year 2017.

At the third stage, in order to arrive at the particular days to be studied for the research, the simple random sampling method through the balloting system was used. This technique was used based on its ability to help eliminate bias and increase representativeness of the population by allowing every unit of the population an equal chance of being selected. This simple balloting system was employed to draw out a constructed week that was applicable to all three years. This helped produce seven (7) editions for each year per newspaper. Here, 52 pieces of paper numbered 1-52 were wrapped and shuffled in a container. Each number represent a week. Then the researchers randomly picked the numbers picked represented Sunday, the second number represents Monday and so on and continued till Saturday. Tables 1, 2, and 3 are the tables that show the arrangement of the selected days of the constructed week for the four selected newspapers per year.

**Table 1: Constructed week for all the dailies for the year 2015**

Days	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Months	January	June	August	May	November	April	February
Weeks	2	26	31	18	45	13	7
Dates	11th	29th	4 <sup>th</sup>	6 <sup>th</sup>	12th	3 <sup>rd</sup>	21 <sup>st</sup>

**Table 2- Constructed week for all the dailies for the year 2016**

Days	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Months	January	June	August	May	November	April	February
Weeks	2	26	31	18	45	13	7
Dates	10th	27th	2 <sup>nd</sup>	4 <sup>th</sup>	10th	1 <sup>st</sup>	20th

**Table 3- Constructed week for all the dailies for the year 2017**

Days	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Months	January	June	August	May	November	March	February
Weeks	2	26	31	18	45	13	7
Dates	8th	26th	1 <sup>st</sup>	3 <sup>rd</sup>	9 <sup>th</sup>	31 <sup>st</sup>	18th

In arriving at the particular stories for coding and consequent analysis, all the stories within the selected edition were examined to see if they qualify as Hepatitis-related stories. To qualify as a Hepatitis-related story, the word Hepatitis must be mentioned in such story's headline or lead paragraph. Thus, only articles with this qualification were coded and analysed for this study.

For the survey, the multistage sampling technique was used to get instruments to the respondents. At the first stage, the existing cluster of states in North-Central zone was maintained using the cluster sampling technique; and two states, Kogi and Benue states were purposively selected due to convenience and reach by the researchers at the second stage. At the third stage, civil servants and adults were selected purposively since it is believed that adults can make personal decisions for themselves without external influence. This character is important to this study because only adults are deemed to have opinion that can be sampled as regards the issue at hand. The civil servants and adults in the capital cities of both states were purposively selected through purposive sampling. Hence, Makurdi and Lokoja were purposively selected for administration of instrument, this is the fourth stage. In the fifth stage, the researchers went to the state secretariats of both states and to different government agencies

within each state capital as well as the streets of each state capital to administer the research instrument to respondents through the aid of the accidental sampling technique.

**Frames:** This study employed a combination of frames that have been used in previous studies (Semetko & Valkenburg, 2000; Shih et al., 2008; Vellek (2016). These frames are peculiar especially to health issues. Hence, for the purpose of this study, stories were coded under the following frames- Human interest, attribution of responsibility, economic consequence, mutation-contagion, globalisation, new evidence and reassurance frames. For a story to be coded under a particular frame, the frame had to be the primary frame in such story. Primary frame in this case refers to the dominant frame used and most times. This frame can be gotten from the headline or lead- these two aspects of an article have been seen to be the best pointers to the content of such article, hence, the law of first mention of frame was followed to arrive at the dominant frame of a given story. This is done based on the researchers' knowledge that there could be more than one frame present in a particular story, but the dominant one in such story was chosen and coded based on the parameters outlined above.

**(01) Human interest frame:** This frame explains the humane aspects of the stories on Hepatitis in

the newspapers. Does the story provide a human example or “human face” on the issue? Does the story employ adjectives and visual information that generate feelings of outrage, empathy/caring, sympathy or compassion?

- (02) **Attribution of responsibility frame:** This frame shows how the media, (newspaper in this case) tie blame and responsibility as it relates to Hepatitis.
- (03) **Economic consequence frame:** This frame focuses on the economic and financial implications of Hepatitis. Parameters to measure this frame in form of questions are: Is there a mention of financial losses or gains now, or in the future? Is there a mention of the cost and degree of expenses involved?
- (04) **Mutation-contagion frame:** For the purpose of this study, this can also be called severity or alarm frame. It highlights the imagery employed by the media to describe the uncontrollable and killer nature of the disease. It makes a cause for alarm as to the case of Hepatitis. Under this frame, war-like, plague-like and killer oriented words are coded.
- (05) **Globalisation frame:** This frame looks at Hepatitis as a global issue, not just an issue ravaging Nigeria. It concentrates on the spreading and globalised effects of Hepatitis.
- (06) **Reassurance Frame:** The frame in a story expresses the idea that the public should not be worried about the effects of the disease. Stories that lay emphasis on the readiness and/or successes of authorities in combating the disease are also included. This frame seeks to explain any action against the disease to allay societal fears.
- (07) **New Evidence Frame:** Stories to be coded under this frame must refer to new findings of research works and discovery of evidences that will help people’s understanding of the disease (Hepatitis in this case).

**Instruments of Data Collection:** The code sheet and questionnaire were used as instruments for data collection for content analysis and survey respectively. For the survey, a 4-point Likert scale structured questionnaire was used to generate data that helped solve the problem. The questionnaire comprised two sections- A and B- where section A dealt with socio-demographic characteristics of the audience while B had items relating to the research questions.

**Methods of Data Analysis:** The data generated were analysed through frequency and simple percentage distribution tables for content analysis while descriptive statistics of weighted mean scores was used for the survey. Data gotten from the questionnaire analysed with the use of the SPSS software. The criterion for the acceptance of a questionnaire item is that the weighted mean score is 2.50 and above. Any item with score below 2.50 was rejected.

**Data Presentation and Analysis**

The content analysis aspect of the study spanned through a period of three (3) years beginning from 1<sup>st</sup> January, 2015 to 31<sup>st</sup> December, 2017. For the four newspapers, 42 editions were analysed per year for three years giving a total of 168 editions analysed for the whole time frame. Of the 168 editions of the newspapers sampled and examined, 22 editions carried stories on Hepatitis for the three years. This means that 146 editions did not carry any story on Hepatitis.

For the survey, 384 copies of questionnaire were distributed to the respondents and 371 of the distributed copies were returned and filled appropriately. Hence, the analysis for the survey was done based on the returned and properly filled 371. The 371 was used because the margin of the missing copies is small and 371 gives a return rate of over 96%. The missing 4% will not affect the accuracy and authenticity of the results.

The demographic characteristics for the survey respondents had more males (56%) than females (46%). The demographic result here further buttresses the fact that there are more males in the civil service than females as majorly civil servants were sampled. It was further shown that many of the respondents were avowed Christians with a percentage figure of 67% while 33% were Muslims. This result could be because Benue state is largely a Christian state while Kogi is evenly distributed between males and females. There were more married respondents than unmarried ones as 76% of the respondents were married while 24% were unmarried. This is not surprising as civil servants are adults who most times are married with few unmarried young people. In the aspect of educational qualification, majority (71%) of the respondents were NCE/HND/Degree holders, with 19% SSCE holders, 7% M.Sc./Ph.D. holders and 3% were first school leavers.

**Research Question 1: What is the dominant frame used to report Hepatitis in Nigeria newspapers?**

**Table 4: Distribution of stories according to dominant frame**

Frames	Newspapers				Total					
	<i>Daily Sun</i>		<i>Daily Trust</i>		<i>The Nation</i>		<i>Vanguard</i>		F	%
Mutation Contagion	F	%	F	%	F	%	F	%	F	%
Human Interest	6	86	3	60	1	33	4	50	14	61
Economic Consequence	-	-	-	-	-	-	-	-	-	-
Attribution of responsibility	-	-	-	-	-	-	-	-	-	-
Reassurance	1	14	2	40	2	67	4	50	9	39
Globalisation	-	-	-	-	-	-	-	-	-	-
New Evidence	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>7</b>	<b>100</b>	<b>5</b>	<b>100</b>	<b>3</b>	<b>100</b>	<b>8</b>	<b>100</b>	<b>23</b>	<b>100</b>

Table 4 shows the distribution of data according to the dominant frame used in reporting Hepatitis stories. Only two of the adopted frames were used majorly to report Hepatitis. The Mutation-contagion (alarm/severity) frame and reassurance (containment) frame were used to report stories on Hepatitis. This revelation implies that Hepatitis was reported more as a very severe disease which has ravaged and wreaked havoc on lives: a disease which people should be very cautious about. The implication of this is that audience members/readers were served with information that would propel them to take positive steps in reducing the effect, if

not eliminating the disease as the information shows the height of danger the disease poses to the human society. It is also interesting to note that *Daily Sun* and *Daily Trust* newspapers had more stories for the mutation-contagion frame than the reassurance frame while *The Nation* newspaper had more stories for the reassurance frame than the mutation contagion frame. The *Vanguard* newspaper evenly distributed the stories among the two frames. However, the use of only two frames in the reports is not too good as some other angles need to be introduced for the audience to know more about the disease.

### Research question 2: Under what subject matters are Hepatitis stories reported in Nigerian newspapers?

**Table 5: Distribution according to subject matters under which Hepatitis was reported**

Subject Matters	Newspapers								Total	
	<i>Daily Sun</i>		<i>Daily Trust</i>		<i>The Nation</i>		<i>Vanguard</i>		F	%
	F	%	F	%	F	%	F	%	F	%
Portrayal of Causes only	2	29	1	20	1	33	2	25	6	26
Solution only	1	14	-	-	1	33	2	25	4	17
Causes and solutions	4	57	2	40	-	-	4	50	10	43
None	-	-	2	40	1	33	-	-	3	13
<b>Total</b>	<b>7</b>	<b>100</b>	<b>5</b>	<b>100</b>	<b>3</b>	<b>100</b>	<b>8</b>	<b>100</b>	<b>23</b>	<b>100</b>

Table 5 shows that Hepatitis was reported under different subject matters of portrayal of causes of the disease, solutions and the combination of both. Data revealed that most (43%) of the reports actually portrayed causes and solutions of the disease combined. This implies that audience members were exposed more to reports on Hepatitis which portrayed not only the causes or solution alone, but a combination of both which invariably makes them make informed decision on how to prevent the disease and how to contain it when confronted with the

disease. It was also noted from the findings here that the *Daily Sun* newspaper had the highest percentage of the portrayal of causes and solutions followed by the *Vanguard* newspaper. It is also interesting to note that *Daily Trust* and *The Nation* newspapers had stories that did not portray either causes or solutions to Hepatitis. This is quite an issue as *Daily Trust* had it as 40% while *The Nation* had 33% of the total Hepatitis-related stories reviewed for the study. These newspapers need to do more as regards the portrayal of causes and solutions when reporting diseases.

### Research Question 3: To what extent are stories on Hepatitis interpretative?

**Table 6: Distribution to stories according to interpretative content**

Interpretative Content	Newspapers								Total	
	<i>Daily Sun</i>		<i>Daily Trust</i>		<i>The Nation</i>		<i>Vanguard</i>		F	%
	F	%	F	%	F	%	F	%	F	%
Straight news stories	3	43	2	40	2	67	4	50	11	48
Feature stories	2	29	1	20	-	-	4	50	7	30
Editorials	1	14	-	-	-	-	-	-	1	4
Interview	-	-	-	-	-	-	-	-	-	-
Column/Opinion	1	14	2	40	1	33	-	-	4	17
<b>Total</b>	<b>7</b>	<b>100</b>	<b>5</b>	<b>100</b>	<b>3</b>	<b>100</b>	<b>8</b>	<b>100</b>	<b>23</b>	<b>100</b>

Table 6 shows how interpretative the stories reported on Hepatitis were. The table shows that majority (48%) of the stories came as straight news genre which implies that majority of the stories were not educative. With only one editorial on the issue for the three-year period, there is a lack of concern about the disease from the select newspapers. It is worthy of note here that *The Nation* newspaper had the highest percentage of non-interpretative stories (straight news reports). Also, *Daily Trust* had the highest percent of interpretative reports with 60% of the stories analysed for the newspaper within the period of study.

Table 7 revealed that respondents were partially

aware of Hepatitis. This is because they agreed to be fully aware of some basic facts of hepatitis including the availability of vaccines; preventability of the sickness; knowledge of the most prevalent types, and the prevalence of disease in Nigeria. They however showed that they were not aware of the causes of the disease. The implication of this finding is that more need to be done to alert the public on the causes of the disease as knowledge of its prevalence alone will not help them prevent the disease when the causes are not known.

**Research Question 4: What is the attitude of the public towards the disease?**

**Table 7: Responses on the awareness level of Hepatitis**

Variables	N	X Mean	Std. Deviation	Decision
1. Hepatitis is a liver disease	371	2.87	.919	Accepted
2. Hepatitis can be prevented	371	3.12	.768	Accepted
3. World hepatitis day	371	2.25	.766	Rejected
4. Causes of hepatitis	371	2.17	.900	Rejected
5. Hepatitis is very rampant in Nigeria	371	2.99	.912	Accepted
6. Hepatitis poses more threat to life than HIV/AIDS	371	3.27	.858	Accepted
7. Hepatitis has different types	371	3.24	.853	Accepted
8. The most prevalent/dangerous ones are Hepatitis B & C	371	2.99	.917	Accepted
9. Hepatitis is highly incurable	371	2.42	.975	Rejected
10. There are vaccines for the prevention of Hepatitis	371	2.89	.810	Accepted
11. Hepatitis is mainly caused by contact with infected body fluids	371	2.49	1.028	Rejected
<b>Valid N (listwise)</b>	<b>371</b>			

Source: SPSS output of Field Survey, 2018

**Table 8: Responses according to the attitude of respondents towards the disease**

Variables	N	M Mean	Std. Deviation	Decision
1. Exposure to hepatitis information has influenced my attitude towards the disease	371	3.38	.767	Accepted
2. Seek more information on the subject because of my knowledge	371	3.03	.709	Accepted
3. Gone for test/screening for hepatitis already	371	2.77	1.172	Accepted
4. Consciously take preventive measures against the disease	371	3.28	.920	Accepted
5. Suggested to others to go for hepatitis screening	371	3.24	1.020	Accepted
6. Counsel others to consciously take preventive measures against hepatitis	371	3.20	.890	Accepted
<b>Valid N (listwise)</b>	<b>371</b>			

Source: SPSS output of Field Survey, 2018

Table 8 showed that the respondents have positive attitude towards the disease. This is evident in the sense that respondents have gone for Hepatitis screening and they seek more information about the disease. The attitude towards it is positive to the extent that they agreed to counseling others about the disease. The implication of this finding is that respondents have positive attitude towards the disease, and this may soon manifest in the gross reduction of the prevalence of hepatitis in Nigeria.

**Discussion**

**Research Question One: What is the dominant frame used to report hepatitis in Nigerian newspapers?**

In order to get this, 7 frames were drawn from past research efforts on diseases. The frames given to health issues by the media influence audience knowledge and attitude toward the health issue which is hepatitis in this case (Kim, 2014). The findings showed that all the stories on hepatitis reviewed in this study were reported using just two out of the seven outlined frames. These two frames were the dominant frames of reportage. The Mutation contagion and reassurance frames were the major frames used in reporting Hepatitis. While the mutation contagion frame had 61% of all the stories reviewed, the

reassurance frame had 39%.

The meaning of this is that Hepatitis as a disease was reported more as a severe case that has ravaged lives in different parts. The mutation contagion frame's dominance in the reports shows the disease as a severe killer disease raising alarm in the reports as to how the disease has gained a 'silent killer status'. Different headlines, kickers and words exemplify this dominance in the reports; a kicker in a *Daily Trust* report of July 28, 2015 reads- 'Hepatitis B Virus 50-100 times more infectious than HIV/AIDS'. Another report on *Daily Sun* of July 28, 2017 has its headline boldly written as 'Deadlier than AIDS' with the rider- 'Experts regret lack of awareness as Nigeria marks world day of Hepatitis'. This shows severity, it raises an alarm, declares a state of emergency on the disease and most especially showcase the disease as an extreme case of societal disorder which seem to have defied efforts at containing it.

This finding is in line with reports by Nwabueze et al. (2017) who studied Ebola virus disease cartoons in three Nigerian newspapers and discovered that the fear frame was dominant. Vellek (2016) in his study of Ebola, also discovered and reiterated the dominance of the mutation contagion frame as the dominant frame in the reportage of health issues. This correlation with the findings of the present research

confirms that when the media report issues such as deadly diseases, raising alarm by creating fear in the hearts of the readers is quite a constant as they feel this will hasten actions to contain the particular issue.

Further findings from the present study revealed that the reassurance frame was also used in relating Hepatitis stories. This shows how the government, NGOs, individuals or the appropriate authorities are containing the disease and raising the hope of the people by allaying their fears that the disease is under control. Stories like this may describe the disease, but the reassurance in the reports bring a feeling of hope to the readers who will know that all hope is not yet lost. This finding is in line with Shih et al.'s (2008) finding indicating that the action frame was the most dominant. Adelakun and Hamedi (2016) also discovered in their study that the treatment/containment was more dominant.

The implication of these findings is that it can be inferred that audience/readers' knowledge of hepatitis is majorly limited to the disease being a plague that deserves immediate arrest. Going by the tenets of the framing theory, it could be inferred that audience know the disease more as an alarm, plague, killer, severe enemy of man and a little about how it is being controlled. This is because, frames shape the ideas, beliefs and attitudes of the audience members.

### **Research Question Two: Under what subject matters are hepatitis stories reported in Nigerian newspapers?**

Data from the analysis show that majority of the stories reported the portrayal of both causes and solutions. With 43% of the stories portraying both causes and solutions, it could be inferred that the audience have been exposed to balanced knowledge of the issue; 26% of the stories portrayed causes without solutions while 17% portrayed solutions without causes, and 13% did not portray any of these. This finding is very interesting seeing that audience members seem to have been exposed to a relatively balanced knowledge of the issues. From the findings, it should be noted that 30% in all did not mention the causes while 39% did not make mention of the solutions to the scourge.

The 43% of the reports which portrayed the causes and solutions of the disease is encouraging as this will serve as guide to cautious readers of the newspapers to make informed life-saving decisions as it relates to the disease. Some of the causes outlined include sexual transmission, alcohol intake, mother-to-child transmission, contact with the blood fluid of an infected person and transmission through unsterilised hospital equipment used by an infected person. The solution portrayed vaccination majorly. In this, we can give a reasonable commendation to the journalists based on the stories reported. From the findings, it was noticed that some (13%) of the reports did not portray either causes or solutions. In the same vein, 30% of the total stories did not portray causes at all in their reports. The effect of this is that audience members will not be exposed to the causes of the diseases and this can pose a great danger because ignorance of the cause of a disease could even be worse than ignorance of a solution. This is because, knowledge of causes fosters prevention while knowledge of solution is only remedial.

The findings are in line partly with the study Media Tenor (2004) who discovered that the treatment and prevention themes topped others in the reportage

of HIV/AIDS. In Gollust's (2008) study of Diabetes, it was also discovered that 42% of the reports did not mention any cause of the disease just as 30% did not mention in this study. The findings show a strong indication of the fact that the journalists armed the readers with the needed information to fight and defeat the scourge of Hepatitis in Nigeria. This is because the knowledge of both causes and solutions of Hepatitis provides the requisite arsenal to put up a real fight against the disease.

### **Research question Three: To what extent are Hepatitis related stories interpretative?**

This education function of the media is one which is of paramount importance in the reportage of issues like Hepatitis. It must be noted that media reports must move beyond the information/surveillance functions to serve greater interests in interpreting the reports to the audience on how the issue at hand relates to them. In determining the extent of interpretation in the reports, the genres of stories were used. This is because non-straight news stories are regarded as interpretative seeing that they are more in-depth and they break down the mass of information for the audience (Ekwueme, 2013). Findings reveal that the reports were interpretative as a cumulative of the interpretative stories gave 52% while non-interpretative stories (basically straight news) gave 48%. Ekwueme (2013) avers that interpretative reporting has to do with explanation and elucidation and aims at breaking down the mass of uninterpreted data in a layman's language. It must be stated however that the interpretation was not to a large extent as non-interpretative stories accounted for a significant 48% of the total stories analysed.

It is a commendable fact that there were more interpretative stories than non-interpretative ones as too many straight news stories present audience with the shallow idea of an issue in general terms. Straight news reports, unlike the feature story do not contain interpretations, forecast or any information outside what has happened, the way it happened (Nwabueze, 2014). The interpretative reportage of Hepatitis in the newspapers is to enable readers get more information and perceive the disease as one which they should be wary and cautious about, which is in line with the tenet of the HBM which talks about how knowledge about the severity of a disease can prompt positive action towards preventing it. In consonance with the Health Belief Model used in this work, the newspapers came up with stories that could help audience members take up responsible health behaviours as regards Hepatitis. The HBM talks about how messages alter personal beliefs of audience, thereby prompting a positive change after getting armed with necessary information regarding the issue of Hepatitis which is what interpretative and educative stories do. The absence of editorials on Hepatitis in this research poses a concern.

The findings here imply that the reportage of hepatitis viral disease is quite interpretative as journalists used interpretative genres like feature stories, columns/opinions and editorials to report the issue of Hepatitis. It must however, be noted that they need to do more in this regard as only straight news stories had close to 50% of the stories analysed while the combination of the interpretative story genres was what could give a slightly higher figure than straight news stories.

#### Research Question Four: What is the attitude of the public towards the disease?

The researcher here ascertained via survey, the attitude of the public towards Hepatitis viral disease in order to correlate the findings of this to the content of the newspaper publications, if they addressed the information needs of the respondents in their report. Findings revealed that respondents were aware of the disease but not to a large extent as items 4 and 5 on the table were rejected due to ignorance of the world hepatitis day and the causes of hepatitis exhibited by respondents. Their knowledge level seemed to be only limited to the availability of vaccines, prevalence of the disease in Nigeria, hepatitis being a liver disease, and the fact that hepatitis can be prevented as recorded in items 1, 2, 6, 7 and 10 in table 7.

The awareness question was asked in order to be able to establish attitude. This is because, one cannot form an opinion or behave in a particular way towards a health issue if he/she does not know it. Awareness precedes acceptance and subsequent adjustment as espoused by the triple A (Awareness, Acceptance, Adjustment) theory. This finding is in line with findings by Ezeah, Apeh, Omerigwe and Ojo (2012) who discovered that awareness of breast cancer was relatively high among Benue women. The study quite contradicts the results of a study by Joda and Aziengbe (2017) who discovered a low rate of awareness and knowledge level of Hepatitis among university students in Wukari. They discovered in their study that only 37% of their respondents were aware while only 7% knew the organ affected by the disease. The high knowledge of the prevalence of hepatitis and its 'deadlier than aids' status could be because of the frames used in the reportage of the disease as the alarm/severity/mutation contagion/deadly frame was used more to report the disease as shown in research question one. However, the findings in this aspect imply that more needs to be done on making the audience aware of the causes of the diseases. This will go a long way in arming them with the needed information to stop further spread of the disease and prevent new cases.

Results showed that respondents have a positive attitude towards the disease as all the items on the questionnaire (which were positive-oriented) were accepted. Respondents behave responsibly towards the disease thereby exhibiting responsible health behaviour as many of them have gone for screening for the disease; they seek to know more about the disease; and they take preventive measures against the disease. It must be noted that they even counsel others to go for screening and teach to others preventive measures to war against the disease.

Related to the findings from the content analysis, it is obvious that the dominant frame of reportage has a positive correlation with respondents' knowledge and consequently on their attitudes as evidenced in the fact that they are taking preventive measures to mitigate further spread of the disease. The knowledge of the respondents also approximates to the reality as seen in the fact that they know that the disease is deadlier than HIV/AIDS. This finding here implies a relationship between what audience know and how they act towards hepatitis with what is reported in the media about Hepatitis.

#### Limitations of Study

The findings here are limited as only a correlation was done; a correlation of attitude with the framing of newspapers. This is limited in a way as it does not establish any cause and effect relationship to make us know causality. Also, it is quite noteworthy to state that content analysis is, to a large extent a quasi-subjective method where the researcher decides a couple of things by himself. The choice of four newspapers out many may not allow room for generalisability of results. The sampling of just two states for the survey still inhibits generalisability of results. Since there are no known data banks for newspapers in Nigeria, some form of analyses of contents could be carried out. A word-by-word or phrase-by-phrase analysis could have been possible with a database of newspapers where exclusion and inclusion criteria will be used to make more detailed analyses. In view of these, more studies need to be conducted in the area, even going beyond newspapers to how the issue is framed in electronic and social media which is a major information source in our days.

#### Recommendations

From the entire study and the consequent findings, the following recommendations are made:

1. More media attention should be given to diseases that do not have outbreak or epidemics. Attention needs to shift to diseases like Hepatitis
2. In reporting health issues like Hepatitis, journalists should be trained to create a balance in slant or frame usage. Journalists should be trained that too much emphasis on the severity or fear factor frame will breed too much fear in the audience.
3. Further efforts by government, NGOs and WHO at educating the public on Hepatitis through other channels should be focused more on the causes seeing that the public are not aware of the causes of the disease.
4. The mass media, in carrying out their social responsibility roles, should organise, plan and execute programmes aimed at creating awareness on Hepatitis during the world Hepatitis day events annually.
5. Medical practitioners, should, in attending to their patients, bring to their patients' awareness the disease called Hepatitis and encourage them to get tested. The government and concerned NGOs should create centres for free Hepatitis screening.

#### Conclusion

From the revelations unearthed by this present study, the researchers conclude that Hepatitis was reported as a severe case that needs urgent action while the newspapers also showed themselves to be socially responsible as they portrayed both causes and solutions to the disease, thereby arming audience members with information enough to combat the disease in their individual ways. It was further concluded that the audience maintain a positive attitude toward the disease and were partially aware of the basic issues surrounding the disease. With stories in the newspapers being interpretative, the information needs of the respondents were attended to.

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